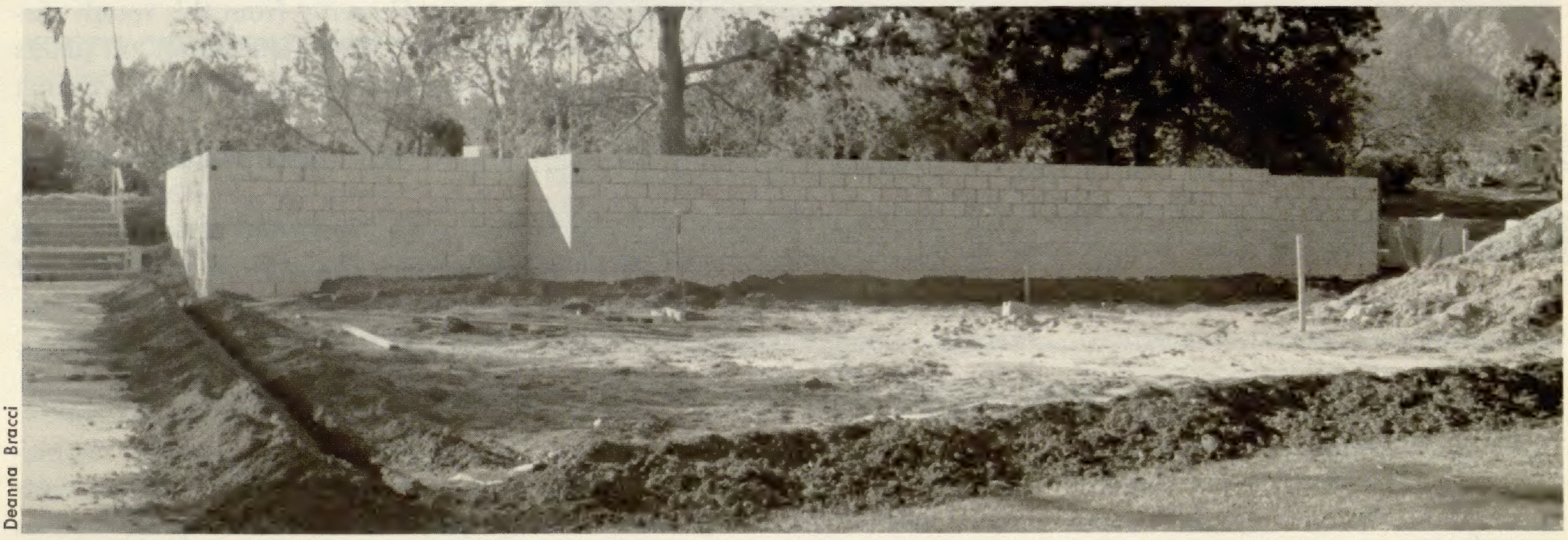
May/June 1988

Lasca Leaves

Los Angeles County Department of Arboreta and Botanic Gardens



Deanna Bracci

A seven-foot drip wall that will be covered by tufa stone rises above the bog garden.

BOG GARDEN AND DRIP WALL NEW ENTRY VISTA FEATURE

IMAGINE A LIGHT MIST rising from the ground as the sun comes up over Arcadia. The air is damp and a feeling of mystery surrounds an exotic vertical garden that begins to take shape as the mist recedes. This remarkable vista is a bog garden with a drip wall, and it is the most recent addition to the Los Angeles State and County Arboretum.

This new garden occupies the space west of Bauer Pool. Construction began in late February and is expected to cost $90,000. The designer, Fred Lang, also designed Meadowbrook and the interpretive center in the Prehistoric and Jungle Garden. Brad Cooke is the contractor. The new bog garden and drip wall should be finished by this summer.

According to Director Francis Ching, bog gardens and drip walls are not a common outdoor attraction in Southern California. "It will be an interesting experience for everyone," Mr. Ching said.

A bog garden is a natural extension of a pool in which water loving plants thrive. The plants are well-adapted to the moist conditions the shallow pond offers. Poorly drained soils that stay moist throughout the year make the bog garden their home. Iris are among the most popular and colorful attractions in the garden. Other plantings might include hardier plants such as cattails, bamboo, horsetails and four-leaf water clovers. Tropical plants also flourish in bog gardens; water poppy, spider lily and umbrella palm are common.

A seven-foot rock wall toward the front forms a drip wall that drains into a shallow pond creating the bog garden. The east facing side of the wall will be decorated with Santa Maria rock, and an array of ornamental plants that thrive in the Southern California climate will cover the drip wall. Ferns and mosses will be the dominant plants.

In nature, a drip wall is usually a rock outcropping where water seeps

through tiny cracks and holes in the face. The flow is slow and constant, providing a moist environment for the clinging roots of water loving plants.

A shallow pond, somewhat like a marsh, will fill the area below the wall. Colorful flowers and lush green plants will make the bog garden their home.

LuAnn B. Munns

An electrician connects pumps that will circulate water over the drip wall.

Visitors will be able to enjoy both areas from a curved seating wall that faces the drip wall above the bog. Santa Maria stone also covers this wall. For a panoramic view visitors can relax on the two curved benches near the tram road that were part of the original plan for the entryway vista. The bog garden and drip wall are constructed on a slope, offering tranquil views from both viewing areas.

Design and landscape around the area contribute to the mysterious image of the garden. The outer side of the drip wall will be covered with tufa stone, a porous volcanic stone. Growing from this rough surface will be a collection of plants that bask in the Southern California sun.

A view from Baldwin Avenue reveals a pathway of stepping pads arranged like islands in the lawn around the front of the easternmost wall.

SMOG GREENHOUSES REOPEN WITH NEW EQUIPMENT

THE DEMONSTRATION smog greenhouses reopened at the Los Angeles State and County Arboretum April 1. The two side-by-side greenhouses were a great success last year with over 4,000 visitors a week passing through the doors. This year totals are expected to be even greater.

With a new $39,000 grant from the Air Resource Board, expansions and improvements were implemented. These will further the educational possibilities of the greenhouses.

A new digital readout screen explains the ozone level numbers registered on the monitors inside the greenhouses. Air intake sampling tubes run from the greenhouses into a monitoring room. Ozone levels are read by a computer, and then the numbers are displayed on a screen.

For those interested in a more humanized approach to information, the grant also provided money for student workers in the greenhouses who will answer questions seven days a week.

Successful features used last year in the greenhouses will be repeated. A questionnaire that asks guests for ideas on what they would like to see in the greenhouses will be distributed again.

Educational displays and brochures are another information source visitors can use to get information about the harmful effects of ozone.

Dr. C. Ray Thompson and Dr. Gerrit Kats from UC Riverside have served as consultants on the project since its beginning. Research is done on the plants at UC Riverside, then appropriate plants are sent to the Arboretum.

Gloria Shamms helped prepare the demonstration greenhouses both this year and last year.

Many common garden flowers can be seen such as camellias, carnations, hibiscus, and petunias. Miniature roses were not part of last year's displays, but visitors requested them for this year. The roses were shipped from central California especially for the display.

Visitors were startled by the results they saw. The petunias suffered the most. Damage of the plant and flowers could be seen within a couple of weeks. Sunflowers, marigolds and western catalpa also received extensive damage.

Superintendent John Provine said, "The greenhouses are educational displays showing the varying degrees of smog damage. They are not meant to tell people what plants to plant or not plant."

Those interested in vegetable gardens can see smog effects on some commonly grown vegetables. Celery, carrots, parsley, beans, corn and tomatoes are just a few that will be on display.

Although many plants are damaged by the ozone, there are a few that seem to be more tolerant. Bermudagrass, succulents, and trees such as birch, maples and oaks seem best able to withstand the damaging effects of smog.

Landscapers and visitors to the greenhouses should be concerned with the results they see. The new equipment will help them understand the effects better and the seven day a week workers can offer insight about the deadly pollutants hovering above our city.

YOUTH CREWS PITCH IN TO REVIVE ARBORETUM GROUNDS

THE GROUNDS STAFF at the Los Angeles State and County Arboretum, besieged by windstorms and killing frosts, got some welcome help from the California Youth Authority this spring. Unusually severe weather strained the staff's ability to maintain the garden at the proper esthetic level for visitors. First a windstorm in December broke limbs and blew down many trees. Then weeks of low temperatures blasted normally hardy plants, necessitating more extensive pruning than is normally done in the spring. Another windstorm in February brought down more trees, broke more limbs and again covered the ground with fallen palm fronds.

In February, calls went out to request help. The Los Angeles County Probation Department sent two crews. For two weeks the young men helped the Arboretum grounds staff clear branches and palm fronds.

California Youth Authority crews based at the Fred C. Nelles School in Whittier responded by sending crews for several months. At Nelles School, youthful offenders progress through a four-phase program emphasizing teamwork and leadership. In time they master skills and equipment they use when they move out into the community in the Public Service Program. In the last quarter of 1987, crews worked more than 3,800 hours on community projects, saving civil agencies more than $26,000. Almost half that time was spent on restoration and maintenance projects after the Whittier Narrows earthquake in October 1987.

Whenever they were not needed at the work cottage or on other emergency projects, crews came to the Arboretum. Working from three to five days a week, the 10-man crews at the Arboretum soon cleared the thicket by the flood control channel. CYA crews continued working on the grounds through the spring, hauling brush and removing broken branches. John Provine, Arboretum superintendent, estimated that their efforts freed two or three gardeners for other projects for at least two months.

Different areas of the Arboretum have benefited during earlier visits by crews from Nelles School. They helped enlarge the cycad garden in the Jungle and removed ivy strangling plants in the Asiatic Section. Removing seedlings on Tallac Knoll and thinning bamboo by the south restrooms were other projects the crews tackled.

The service these young people contributed to the Arboretum not only helped restore the garden, but also gave them the opportunity to enhance work skills and attitudes needed when they return to the community.

LuAnn B. Munns

Mitch Meza *(center)* and Lester Neu *(right)* supervise a California Youth Authority crew clearing brush beside the flood control channel.

ARBORETUM TREE CENTER OF ARBOR DAY CEREMONY

Every year on March 7, hundreds of schools in Los Angeles County celebrate Arbor Day by planting trees distributed by the Los Angeles State and County Arboretum. With the support of the Oak Tree Foundation and the California Arboretum Foundation, the Arboretum gave trees to about 500 schools in 1988.

The Arboretum began the Arbor Day program to encourage environmental awareness and conservation among young people. *Tabebuia impetiginosa* was chosen as tree of the year because it is one of the most popular Arboretum introductions. The tree also symbolizes the 40th anniversary of the Arboretum and the theme, "Coloring California for 40 Years," that highlights California Arboretum Foundation promotions this year.

John Marshall Elementary School in Glendale was one of the participants in the Arboretum's Arbor Day program. The students assembled for a ceremony that began with singing an original composition and showing tree posters they had designed. Highlight of the ceremony was planting the tree received from the Arboretum.

This is the level of lasting student involvement the Arboretum hopes to inspire by giving trees to schools.

Wendy Sekovich

Celebrating Arbor Day, students at John Marshall Elementary School plant a tree from the Arboretum *(above)* and present an assembly program *(below)*.

Wendy Sekovich

(LASCA continues after page 32)

20th Century City Boy Restores

19th Century Farm Tools

(EDITOR—*Perry Minton joined Las Voluntarias y Los Ayudantes about three years ago after he retired from Chevron USA. His motive for volunteering may have initially been to see more of his wife, Siby, who in 10 years put so much energy into Las Voluntarias projects that in 1986 she was named Department Volunteer of the Year.*

But after spending a year on the California Arboretum Foundation Board of Trustees, Mr. Minton began looking for engrossing projects for which no one else had time. In the following account he tells about the 28 months during which he researched and restored antique farm implements for a display in the Coach Barn. Mr. Minton spent about 450 hours on the project, not counting his research in museums across the United States and Canada. To make the display of tools more significant, new explanatory labels on each tool will highlight some of the information he uncovered including the tool's name, its function, and its price when new.)

Deanna Bracci

The author examines a Sears Roebuck "Planet Jr." cultivator to determine if it is suitable for restoration.

AS A RELUCTANT city dweller most of my life, I have had an admiration for old-time country folk who got by without the blessings of civilization as we know it nowadays. Therefore, when I encountered the Arboretum's collection of old farm and blacksmith implements I decided to try my hand at restoring a few of the more serviceable-looking items.

As a warmup project historical curator Sandy Snider suggested a damaged wheelbarrow at the Santa Anita Depot. At once I learned the need for research, for there wasn't enough left of the barrow to indicate just what it looked like during its heydey. Eventually it was restored, but only after a three-hour conference with the man who laid the tracks at the Depot, plus much eye-straining study of one old photograph in which a similar wheelbarrow appeared. The resulting restoration was 85 percent new. Only the iron wheel, axle and a couple of straps were salvageable from the original, and practically every piece of wood was beyond help. Naturally, after the work was completed, I discovered a near twin wheelbarrow in the Arboretum's collection.

As Mark Twain noted, ignorance and confidence breed success. Full of these requirements, I proceeded to tackle the farm tools in the Coach

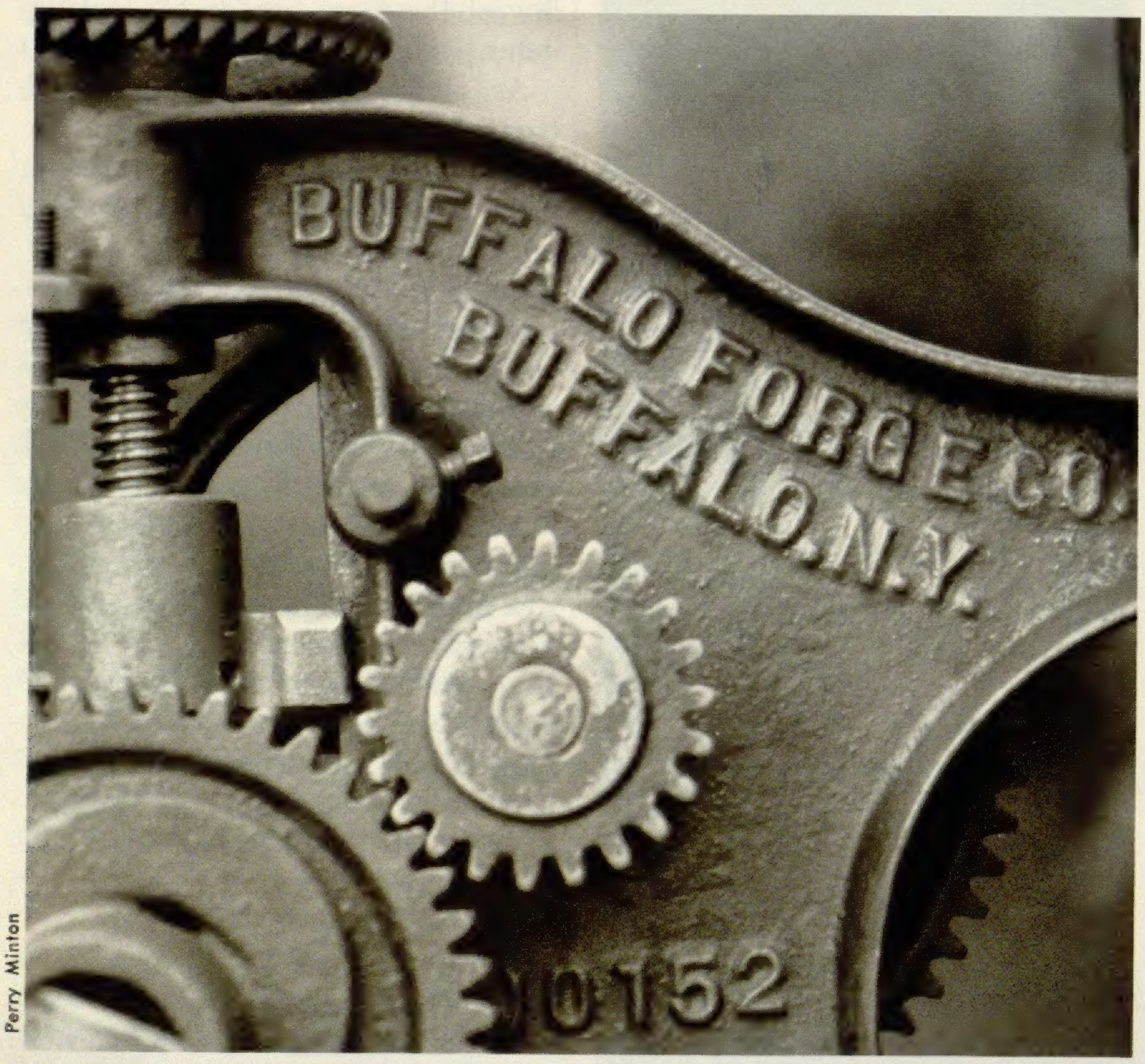
Barn, starting with a single-wheel hoe, a type of garden cultivator from the late 1800s. Having been told by the Depot track layer that 19th century nuts and bolts were not hexagonal like current ones but square, I searched several local and very up-to-date supply stores for the square type and found none. Lengthy exploration turned up a specialty hardware store which could supply the square type for a price. After that, I had no qualms about sawing apart hopelessly rusted 100-year-old nuts and bolts. Before long the single-wheel hoe was totally functional. In fact, it was so functional I ripped up a fair piece of my sideyard testing it.

One of the most interesting items was the "Handiman" dropping seeder, another old garden tool. It was designed to plant seeds of various sizes by means of a chain-driven reservoir. Unfortunately, the chain was missing. This detachable malleable link type is no longer seen but was quite common a hundred years ago. "Old Bill," the oldest native-born citizen still living in Buena Park, found a 15-foot section of chain in Bakersfield after a two-month search. Now the seeder works again and the California Arboretum Foundation is the owner of an extra 10 feet of detachable link chain not needed on the seeder.

As I tackled each project, more people came to my aid. Neighbors Lou Muto and Reno Yurada helped with rewelding broken iron, lifting heavy pieces and furnishing ideas. Mike Vetti, owner of Alhambra Mower Shop, provided blades for the silage cutter. Bill Peters of Trail Chemical gave a sample of polyethylene glycol to preserve wood.

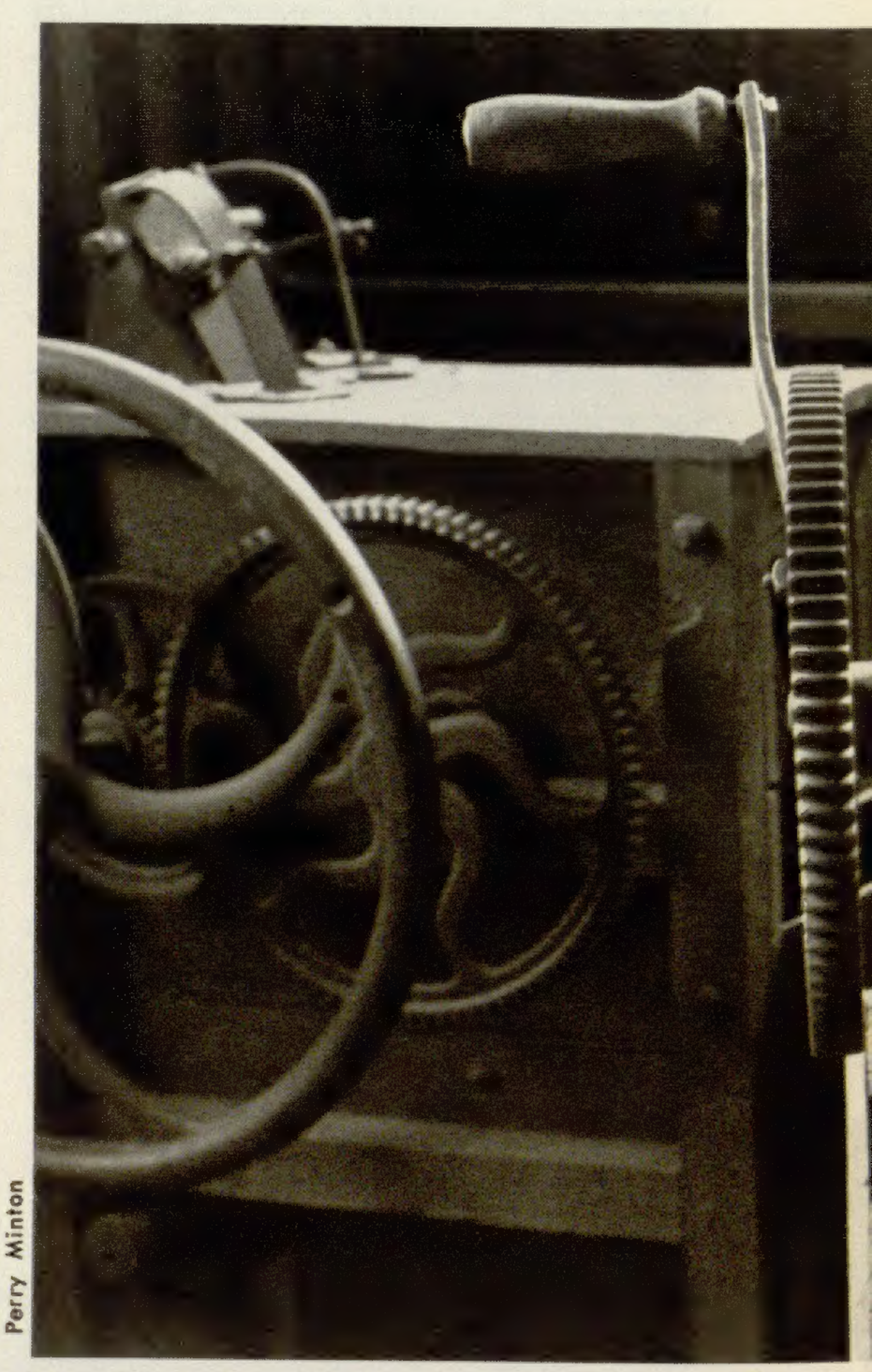
As a result of growing interest in the restoration—and the approval of Special Services Chief Tak Niiya—Sandy Snider and my wife, Siby, spent many hours planning new wrought iron gates for the two stalls in the Coach Barn. Visibility of the display is now greatly improved with no loss of security.

Each restoration supplied new insights into the ingenuity of 19th century craftsmen who designed and built machines which, after many years of hard use and many more of neglect, could usually be made to function again with the application of paint, a little oil and some strong language. It must be admitted, however, that a few problems cropped up, usually something involving rust —when the rust is very old and an inch thick as it always seemed to be, drastic measures were required. The moldboard plow, for example, had an almost impenetrable layer of rust holding all the parts together, as did the grindstone. When restoration is the objective it isn't wise to give way to temptation and apply a sledgehammer to recalcitrant pieces. Other solutions had to be found, such as



Perry Minton

Gears of a Buffalo drill


Perry Minton

Restored clover cutter

heating with a blowtorch or using acid to descale iron. At one point I found it necessary to clean a large steel surface by means of a grinder equipped with a coarse disc turning at 10,000 rpm. I worried about grinding clear through the part being cleaned until I realized rust doesn't give off sparks. Therefore, when the first sparks appeared I was just reaching clean steel and could stop grinding.

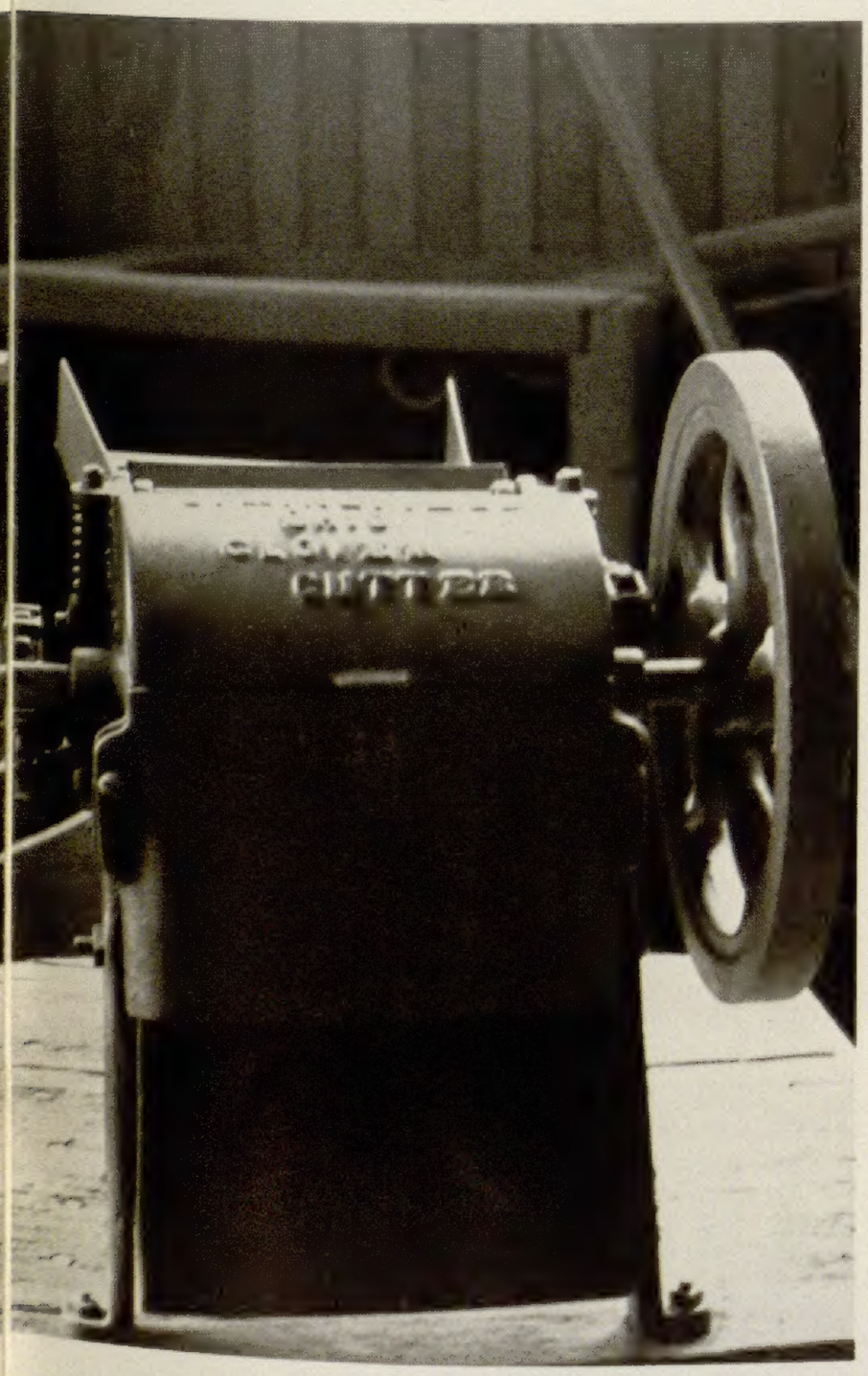
Twenty-six tools were restored between December 1985 and February 1988. Most, but not all, can now be used for their original purposes. In a few cases, vital parts were missing and could not be duplicated. In others, fragile wood was retained for the sake of appearance and historical authenticity.

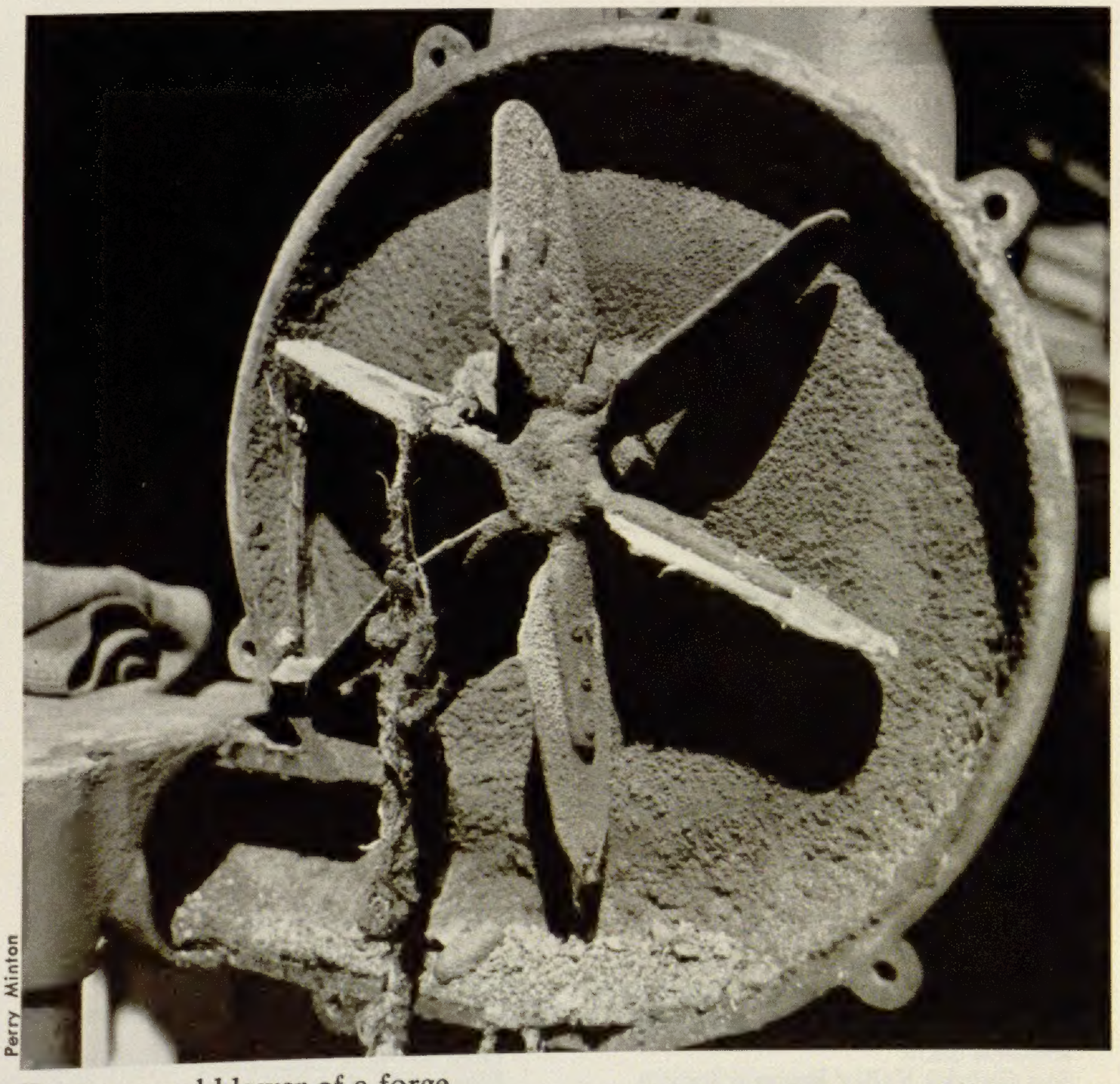
Invaluable sources of information were old Sears Roebuck catalogs dating back as far as 1897. When catalogs were insufficient, librarian Joan DeFato guided me through the catacombs of the Plant Science Library. Billy Hawk led me to the proper rusty steel drum in the maintenance yard when it was needed to double for a forge hearth. The staff people in the offices of Francis Ching, John Provine, and the Foundation were invariably helpful and friendly even though my requests and questions must have seemed strange at times. Harry Kelsey, chief curator at the Los Angeles County Museum of Natural History, tried to educate me in at least two philosophies of restoring antiques, while other museum representatives in this country and Canada, by mail and in person, took time to provide information and guidance.

The display on view in the Coach Barn is a window into the past which lets us see what implements were available in the Baldwin years when earlier gardens were created on the site of what is now our Arboretum.

Deanna Bracci

Perry Minton will install these new handles after he restores the metal parts of a dropping seeder.





Perry Minton

Rust-covered blower of a forge

Deanna Bracci

Volunteers installing pavers made from crushed brick work toward completing the Water Conservation Garden.

CALENDAR OF EVENTS

MAY, JUNE, JULY

LOS ANGELES STATE AND COUNTY ARBORETUM, Arcadia

APRIL 30 — 5 to 7:30 p.m.
Baldwin Bonanza Preview Party
California Arboretum Foundation
MAY 1 — 9 a.m. to 4:30 p.m.
BALDWIN BONANZA
California Arboretum Foundation
MAY 15 — 9 a.m. to 4:30 p.m.
Epiphyllum Society
Epiphyllum Society of America
MAY 28-30 — 9 a.m. to 4:30 p.m.
Santa Anita Bonsai Show
Santa Anita Bonsai Society
JUNE 4 — noon to 4:30 p.m.
Hemerocallis Show
Southern California Amaryllis and Hemerocallis Society
JUNE 8 — 4 p.m.
ANNUAL MEETING
California Arboretum Foundation
JUNE 11-12 — 9 a.m. to 4:30 p.m.
Azalea Show
Valley Satsuki Azalea Society
JUNE 18-19—Sat. 1 p.m. to 4:30 p.m.
Sun. 10 a.m. to 4:30 p.m.
Gladiolus Show
Southern California Gladiolus Society
JUNE 25-26 — 9 a.m. to 4:30 p.m.
Fuchsia Show
National Fuchsia Society
JULY 1-3 — 9 a.m. to 4:30 p.m.
Cactus and Succulent Show
Cactus and Succulent Society of America
JULY 30-31 — Sat. 1 p.m. to 5 p.m.
Sun. 9 a.m. to 4 p.m.
Begonia Show
San Gabriel Valley Begonia Society

AUGUST 20 — 8 p.m.
Summer Picnic Concert
California Arboretum Foundation
OCTOBER 14-23 — 10 a.m. to 6 p.m.
LOS ANGELES GARDEN SHOW

SOUTH COAST BOTANIC GARDEN, Palos Verdes Peninsula

APRIL 30-MAY 1—Sat. 1 p.m. to 5 p.m.
Sun. 10 a.m. to 4 p.m.
Rose Show
South Coast Rose Society
MAY 14-15 — 9 a.m. to 4 p.m.
Fiesta de Flores
South Coast Foundation
MAY 22 — 10 a.m. to 4 p.m.
Epiphyllum Show
South Bay Epiphyllum Society
May 29 — 2 p.m.
Landscaping lecture
Dean DuVander
JUNE 4-5 — Sat. 9:30 a.m. to 4:30 p.m.
Sun. 10 a.m. to 4:00 p.m.
Fuchsia Show
South Coast Fuchsia Society
JUNE 11-12 — Sat. noon to 4:30 p.m.
Sun. 9 a.m. to 4:00 p.m.
Cactus and Succulent Show
South Coast Cactus & Succulent Society
JUNE 19 — 2 p.m.
How to Plant a Succulent Arrangement
Eleanor Barker

JUNE 26 — 9 a.m. to 4 p.m.
Jaguar Concours
Jaguar Owners' Club

DESCANSO GARDENS, La Canada Flintridge

MAY 7-8 — Sat. 12 to 4 p.m.
Sun. 10 a.m. to 4 p.m.
Geranium Flower Show
Los Angeles International Geranium Society
MAY 21-22 — Sat. 1 p.m. to 4:30 p.m.
Sun. 9 a.m. to 4:30 p.m.
Rose Show
Los Angeles Rose Society
MAY 24 — 1 p.m. to 4:30 p.m.
Flower Show
Judges Council of Southern California
MAY 28-29 — 9 a.m. to 4:30 p.m.
Chrysanthemum Plant Sale
Glendale Chrysanthemum Society
JUNE 3-30 — 9 a.m. to 3:30 p.m.
Artist of the Month
Dory Grade
JUNE 11-12 — 9 a.m. to 4:30 p.m.
Fuchsia Show
National Fuchsia Society
JUNE 18-19 — 9 a.m. to 4:30 p.m.
Arts and Crafts Faire
Descanso Gardens Guild
JUNE 25-JULY 3 — 9 a.m. to 4:30 p.m.
Bonsai Show
Descanso Bonsai Society
JULY 1-28 — 9 a.m. to 3:30 p.m.
Artist of the Month
Womens Painters West